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Additive formulation elastoplasticity at finite strain

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Abstract

© Published under licence by IOP Publishing Ltd.In the article a method of investigation of elastic-plastic deformation for solids under complex loading is presents. Resolving equation based on the principle of virtual power. For simulation of plastic deformation taken the associated flow law with updating the stressed state. Numerical implementation is based on using 8-node finite element discretization. Numerical calculations show the suitability of the proposed methodology.

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